1.5 Project Fact Sheet

Location South of Meliadine Lake, 25 km north of Rankin Inlet.

Access Current winter road access from Rankin Inlet and by helicopter from Rankin Inlet airport. Ultimate access during construction and production will be a 27.4 km all-season road connecting the mine site and deposits to Rankin Inlet.

Ownership Comaplex is the sole owner of the Meliadine Gold Project.

Mineral Claims The main gold deposits are situated on leased claims grandfathered under the Canadian Mining Regulations that were staked prior to the Nunavut Land Claims Agreement.

Mining Method The proposed mine is primarily an underground mine with contributions from open pits. Approximately two thirds of the ore will be mined from the underground workings and one third from open pits for a total of 3000 tonnes/day. The open pits will be mined in sequence over the life of the Project. The total disturbed area of the proposed Project is estimated to cover approximately 410 hectares.

Mining Areas Three deposits are to be mined:

1. Tiriganiaq – underground and open pit mining is planned. 1.2 million tonnes of above cut off grade is scheduled from the open pit operation and 8.0 million tonnes from underground. The mill site will be located immediately north of the Tiriganiaq gold deposit.
2. F Zone – is located 5.1 km from the proposed mill site; 1.2 million tonnes of above cut off grade to be mined from up to 6 open pits.
3. Discovery is 22.4 km from the proposed mill site; 0.4 million tonnes of above cut off grade will be mined from an open pit.

Life of Mine Current estimates support a ten year mine life based on 2009 mineral resource estimates. The property has excellent exploration potential and extension of the mine life is possible with further work.

Gold Resource 2.4 million ounces of gold are in the measured / indicated categories; 1.2 million ounces are in the inferred category, prior to adding in the 2009 drill results.

Mill Process Conventional gold milling is to be used to process 3000 tonnes of ore per day. The ore will be crushed and ground to the size of fine sand using a sequence of crushing and grinding circuits. After grinding, about 45% of the gold will be recovered in a gravity plant. The remaining gold will be recovered using conventional carbon-in-pulp cyanide leach technology with a flotation circuit. Any residual cyanide will be recovered or destroyed prior to deposition of tailings in a tailings impoundment area. The final step is the smelting of gold bars on site.

Personnel A Project work force of approximately 430 personnel are required for operations with 230 to 240 on site at any one time.

1.6 Lead Authorizing Agency and Role

Comaplex's rights to explore for and exploit minerals on the Project lands are derived from Mineral Leases registered pursuant to the Canada Mining Regulations and administered by Indian and Northern Affairs Canada (INAC). These mineral rights flow from mineral claims staked prior to the Nunavut Land Claims Agreement (NLCA).

Surface ownership of these lands and the subsurface ownership of lands surrounding existing mineral claims at the time of the NLCA were transferred to the Kivalliq Inuit Association when the NLCA came into effect.

The lead authorizing agencies for the Meliadine Gold Project as it moves forward are the Nunavut Planning Commission (NPC) and the Nunavut Impact Review Board (NIRB). NPC will determine if the proposed Project is in conformity with the Keewatin Regional Land Use Plan (Plan). If the Project is found to be in conformity with the Plan, NIRB will screen the project proposal to determine whether a review is required, and provide a Screening Decision Report to the federal Minister.

Afterwards numerous other agencies will also be involved in various aspects of the environmental review and permitting processes.

1.7 Current Licences, Permits, Agreements and Approvals

Land and environmental management in the region of the Project is generally governed by the provisions of the Nunavut Land Claims Agreement. Table 1-3 below lists the current licenses, authorizations, and permits held by the Meliadine Gold Project.

Table 1-3: Current Licences and Permits – Meliadine Gold Project

Type	Permit Number	Issuing Agency	Expiry date
Type B Water Licence	2BB-MEL0914	Nunavut Water Board	31 Jul 2014
Exploration Land Use Licence	KVL100B195	Kivalliq Inuit Association	31 Oct 2010
Drilling Land Use Licence	KVL302C268	Kivalliq Inuit Association	1 Jul 2010
Overland Right-of-Way	KVRW07F02	Kivalliq Inuit Association	26 Oct 2010
Meliadine Lake Right-of-Way	KVRW98F149	Kivalliq Inuit Association	30 April 2010
Commercial Lease	KVCL102J168	Kivalliq Inuit Association	30 Jun 2011
Mainland esker Quarry Permit	KVCA07Q08	Kivalliq Inuit Association	15 Sep 2010
WCB Program Authorization		Worker's Compensation Board	31 Dec 2009
CWM Claims Drilling Permit	N2007C0041	Indian and Northern Affairs	13 Apr 2010
Hamlet Disposal Authorization	Letter of approval	Hamlet of Rankin Inlet	No end date
GN-Wildlife research permit (expired)	2009-043	Dep't of Environment, Nunavut Government	31 Dec 2009
DFO Letter of Approval, Animal Use Protocol (expired)	FWI-ACG-2009-030	Fisheries and Oceans	31 Dec 2009
Licence to Fish for Scientific Purposes (expired)	S-09/10-1024-NU	Fisheries and Oceans	31 Dec 2009
Archaeologist permit (expired)	08-003A	Dep't of Culture, Language, Elders and Youth	31 Dec 2008
Scientific Research Licence (expired)	0301 309N-M	Nunavut Research Institute	31 Dec 2009
Exploration Land Use Licence	KVL308C07	Kivalliq Inuit Association	13 Jun 2010
Type B Water Licence	2BE-MEP0813	Nunavut Water Board	31 Oct 2013

1.8 Required Licenses, Permits, Agreements and Approvals

A conformity determination by the Nunavut Planning Commission is the initial approval required by the Meliadine Gold Project. Only after the Nunavut Planning Commission finds the Project conforms to the Keewatin Regional Land Use Plan would the Nunavut Impact Review Board initiate the environmental assessment process. A Project Certificate from the Nunavut Impact Review Board is the next approval required by the Meliadine Gold Project. Other operating permits and licences can only be issued after the issuance of the Project Certificate.

Upon receiving the Project Certificate, the Meliadine Gold Project will proceed to obtain a Class A Water Licence. The water licence will allow for the use of fresh water and deposit of wastes to receiving water.

Authorization(s) from the Department of Fisheries and Oceans will be needed as fish habitat will be altered, disrupted and/or destroyed by the development of the mine. A Schedule 2 listing under the Metal Mining Effluent Regulations (MMER) is another requirement as Lake B7 is intended to be used as a tailing impoundment area resulting in the permanent loss of the lake.

As the Meliadine Gold Project is on Inuit land, a number of permits will be required to carry out commercial activities and continue exploration drilling.

A listing of anticipated permits, licences, agreements, authorizations and approvals for the Project is presented in Table 1-4.

Table 1-4: Pending Permits, Licences, Agreements and other Authorizations

Authorizations	Authority	Basis
Conformity determination with Keewatin Regional Land Use Plan	Nunavut Planning Commission	Allows project to proceed to impact review
Project Certificate	Nunavut Impact Review Board	Allows project to proceed to authorizations to operate
Type A Water Licence	Nunavut Water Board	Allows use and disposal of water and waste
Inuit Impact Benefit Agreement	Kivalliq Inuit Association	Compensation for negative impacts and ensures benefits flow to the Inuit
Water Compensation Agreement	Kivalliq Inuit Association	Compensation for negative impacts on water
Development Partnership Agreement	Economic Development & Transportation – GN	Assures socioeconomic benefits flow to local communities
Production Lease	Kivalliq Inuit Association	Allows production on Inuit Lands
Right-of-way	Kivalliq Inuit Association	Allows right-of-way for all-season road across Inuit Lands
Right-of-way	Hamlet of Rankin Inlet	Allows right-of-way for all-season road crossing municipal lands
Quarry Licence	Kivalliq Inuit Association	Various quarry sites along the right-of-way for building the road from Rankin Inlet
Certificate of Exemption	Kivalliq Inuit Association	Non-commercial activity such as environmental monitoring will continue into operations
Quarry Approval	Hamlet of Rankin Inlet	Aggregates and rock for construction of lay-down area and tank farm
Approval to Construct	Hamlet of Rankin Inlet	Construction of 25 million litre fuel tank, lay down area, and secure storage building in the industrial area
Approval to use the Municipal Landfill	Hamlet of Rankin Inlet	Inert, nonhazardous solid wastes are to be disposed of in the municipal landfill
Schedule 2 Amendment to Metal Mining Effluent Regulations	Environment Canada / Department of Fisheries and Oceans	Use of fish bearing waters for a Tailings Impoundment Area
Fisheries Authorizations	Department of Fisheries and Oceans	No-net-loss of fish habitat, to replace fish habitat lost due to the alteration, disruption and/or destruction of fish habitat
Navigable Waters Permits	Transport Canada	The building of bridges across the Meliadine and Char Rivers, and a jetty in Meliadine Lake.
Explosive Manufacturing Licence (renewal by contractor)	Natural Resources Canada	Storage, manufacture and use of explosives at the mine site
Explosive Magazine Permit renewal	Workers' Safety & Compensation Commission	Permits the placement of an explosive magazine on site
Mineral Lease	Indian and Northern Affairs	Maintain surface and subsurface rights around mineral lease
Class 2 Permit for heritage sites obtained by qualified, professional archaeologist	Department of Culture, Language, Elders, & Youth	Two heritage sites within the boundaries of the Tiriganiaq pit & several at the Meliadine bridge location are to be mitigated
Socioeconomic & Traditional Knowledge Research Licence obtained by qualified contractor(s)	Nunavut Research Institute	Continuing further Inuit Qaujimajatuqangit and socioeconomic studies

The Meliadine Gold Project proposal involves building, operating, decommissioning and rehabilitating a conventional gold mine. Some facilities development will take place at Rankin Inlet, where materials will be received by air and sea transport. Year-round access between Rankin Inlet and the mine site will require a road, including bridges over the Char and Meliadine Rivers. Mine site development will include underground and open pit mining that will provide ore to the mill. A mill, camp, powerhouse, tank farm, tailings impoundment area, waste rock and overburden management areas, water supply, and sewage treatment plant are integral components of this proposal. At this time, underground mining is contemplated only at the Tiriganiaq deposit, with open pits planned at Tiriganiaq, F Zone, located 5.1 km southeast of the main site, and at Discovery, located 22.4 km southeast of the main site.

2.1 Mineral Resources

Mineral resource estimates are updated on the Meliadine gold deposits on an annual basis so each season's drilling results are incorporated into the estimates. In February 2009, Comaplex completed an NI 43-101 compliant Preliminary Assessment, also known as a Scoping Study, on the Meliadine property using independent consultant Micon International. This study assessed, using 2009 resource estimates, the potential of the Tiriganiaq, F Zone and Discovery deposits to support a gold mining operation centred on a mill site located immediately north of the largest deposit (Tiriganiaq) and forms the basis of this report. Mineral resource estimates for 2009 and 2010 for all deposits are outlined in Table 2-1.

Table 2-1: Mineral Resource Estimates (oz gold)*

	Indicated and Measured Resources		Inferred Resources	
	2009	2010	2009	2010
Tiriganiaq Deposit	2,036,750	2,720,900	893,000	1,037,000
F-Zone Deposit	111,000	206,000	113,600	252,800
Discovery Deposit	259,100	364,500	148,950	145,800
Wolf Deposit				136,600
Pump Deposit				157,400
Total	2,406,850	3,291,400	1,155,550	1,729,600

* Note: The 2009 resource estimates form the basis for this report.

The combination of the three main deposits results in a 2009 resource base of 2.4 million ounces of gold in the indicated and measured categories and approximately 1.16 million ounces in the inferred category. Although updated mineral resources released in January 2010 are included in the table, they do not form the basis for this report but do suggest a longer mine life. The resource estimates will be adjusted accordingly in the Environmental Impact Statement.

2.2 Project Construction

The development of the Meliadine Gold Project will require land within the municipality of Rankin Inlet and at the mine site for infrastructure, open pits, waste rock and overburden management areas, and the tailings impoundment area. The anticipated land area requirements are tabulated in Table 2-2.

Table 2-2: Land Requirements for Mine Components (hectares)

Project Component	Total	Tiriganiaq	F Zone	Discovery
Off site developments in Rankin Inlet	3			
All-season road between Rankin Inlet and mine site	32			
On site mine infrastructure	7			
Open Pits	24.5	9.9	11.4	3.2
Waste rock and overburden management areas	57.7	32	15.7	10
Low grade stockpile	17.8	16.2	1.2	0.4
Run-of-mine stockpile	0.8	0.7	-	0.1
Mine site roads	27.4	12.9	3.2	11.3
Tailings impoundment area	239			
Total	**409.5**			

2.2.1 Project Infrastructure Located in Rankin Inlet

2.2.1.1 Dockside Laydown Area - Rankin Inlet

During construction and operation of the proposed mine, the majority of the materials and supplies will be mobilized to Rankin Inlet by seasonal sea lift. In the first 3 years, construction materials will be off-loaded followed in later years by mine supplies. Upon arrival, materials and supplies will be unloaded and stored at Rankin Inlet for delivery to the mine site by road or preferably, moved directly to the site following offloading. No additions to the current Rankin Inlet dock or Itivia off-loading ramp are planned. A level, drained lay-down area of about 2 hectares with a security fence and yard guardhouse/office will be necessary. Land leased from the municipality or airport authority would be required.

Weather sensitive materials, explosives, and hazardous materials may be stored for short periods in a secure storage building or other local storage facility before being moved to the mine site. Such a facility could be built in Rankin Inlet or if suitable arrangements could be made, leased from a local business. Explosives in transit would be stored in a fenced and locked transit magazine outside the town limits.

Incoming air freight will be consolidated at either the storage area in town or moved directly from the airport to the mine site. Expediting services are currently provided by a local contractor. Implementation of the Project would greatly increase this scope of work resulting in greater local opportunities.

2.2.1.2 Fuel Storage Area - Rankin Inlet

Annual diesel fuel requirements for the Project will be of the order of 20 to 25 million litres. This will be shipped in bulk in deep-sea vessels to Rankin Inlet during the summer sea lift. Primary fuel storage tanks would be located at Rankin Inlet. The fuel storage tanks will be within a lined, bermed area with a

storage capacity of 110 percent the volume of the largest tank, in accordance with current regulatory requirements. Fuel will be off-loaded from the deep-sea vessels to the storage tanks through a pipeline. Fuel will be transferred to the mine site in double walled tanker trucks on a year-round basis.

Discussions with the Hamlet of Rankin Inlet are underway to identify an area for the proposed tank farm, lay-down area, and secure storage area. The sites are expected to be located within an industrial area close to the port and marine dock. It is in the interest of both parties to have the facility in a location where it could service the town on closure of the mine.

2.2.2 Road Access and Routes

2.2.2.1 Access Road from Rankin Inlet to Mine Site

The predevelopment of an all-season access road joining Rankin Inlet to the mine site is critical to ongoing exploration and construction of the mine. For the latter, it will facilitate the timely transport of materials for the mine buildings, machinery for construction, mining equipment, and supplies from the barges and that purchased in town to the mine site. The road will also be used to transport the work force between Rankin Inlet and the site. The proposed road route is illustrated in Figure 2-1.

For the residents of Rankin Inlet, the road will provide ease of access to traditional areas north of the Meliadine River. For the Kivalliq region as a whole, it can serve as a part of the road linking Chesterfield Inlet to Rankin Inlet[1].

The proposed access road is a continuation of an existing road on municipal land. It will originate near the Char River and continue to the Meliadine River, east of Iqalugaarjuup Nunanga Territorial Park. The road will not enter the Park.

If not already upgraded, a new bridge will be built to replace the current Char River Bridge. A single span bridge will also be built to cross the Meliadine River with the abutments and any ancillary facilities all located above the ordinary high water mark. The height of the bridge above the water will meet the requirements for navigable waters. Both bridges would be sized for the maximum single loads that would need to be moved to the Project site, but also in consultation with the Nunavut transportation with a view to long-term needs. Tentative plan and elevation views of the bridge are shown in Figure 2-2.

Initial plans are to build both bridges so that there is no impingement on the rivers themselves, thus allowing construction under the current Type B Water License. A similar approach will be used in crossing small seasonal streams having fish migration. The intent is to avoid impacting streams having fish migration and to leave any that are crossed by the road in their original state.

[1] Strong support for the road and its early construction has been voiced by the Hamlet of Rankin Inlet, Kivalliq Inuit Association, the Agiggiaq Hunters and Trappers Organization, and the general public at consultation sessions and other meetings.

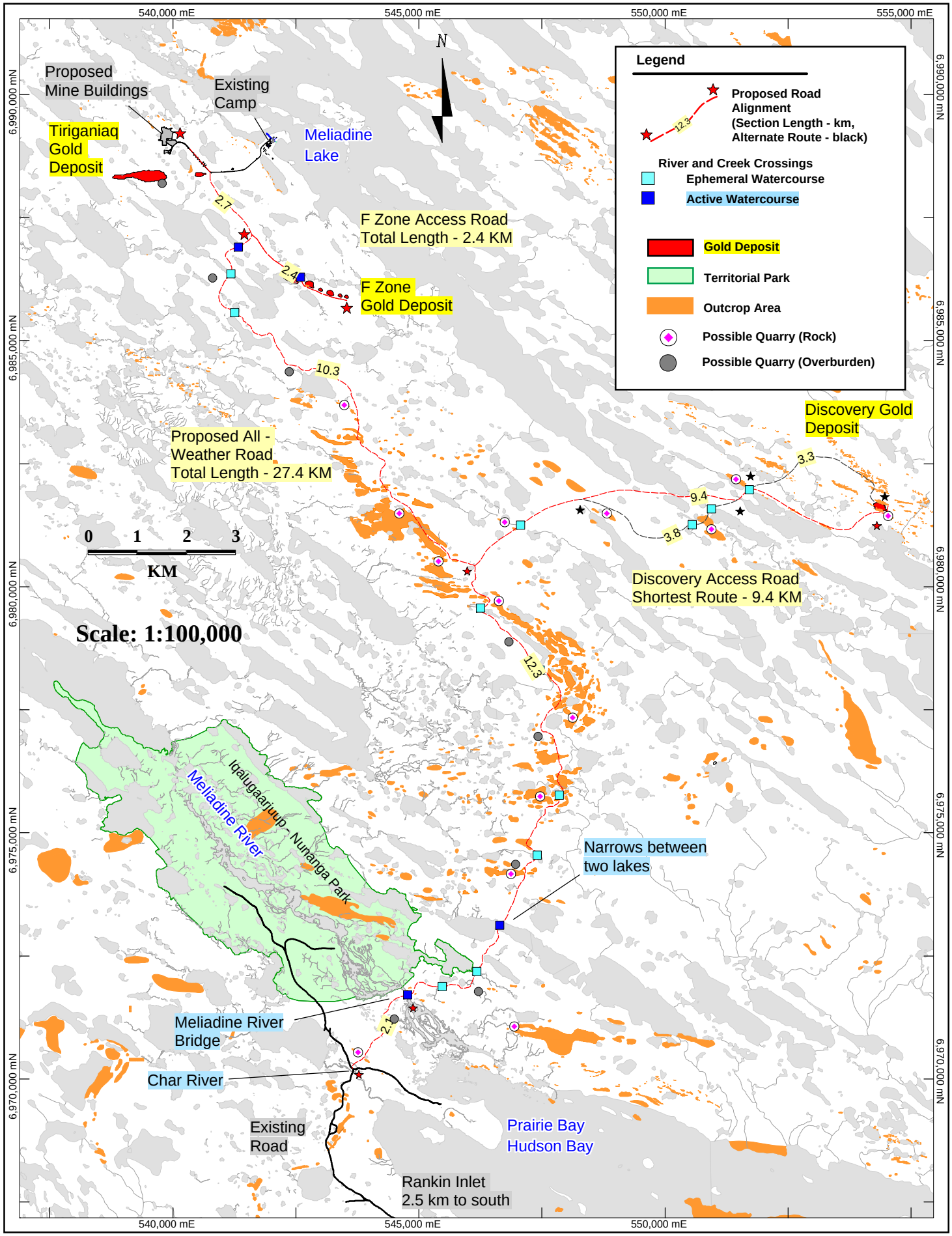

Figure 2-1: Proposed All - Season Road

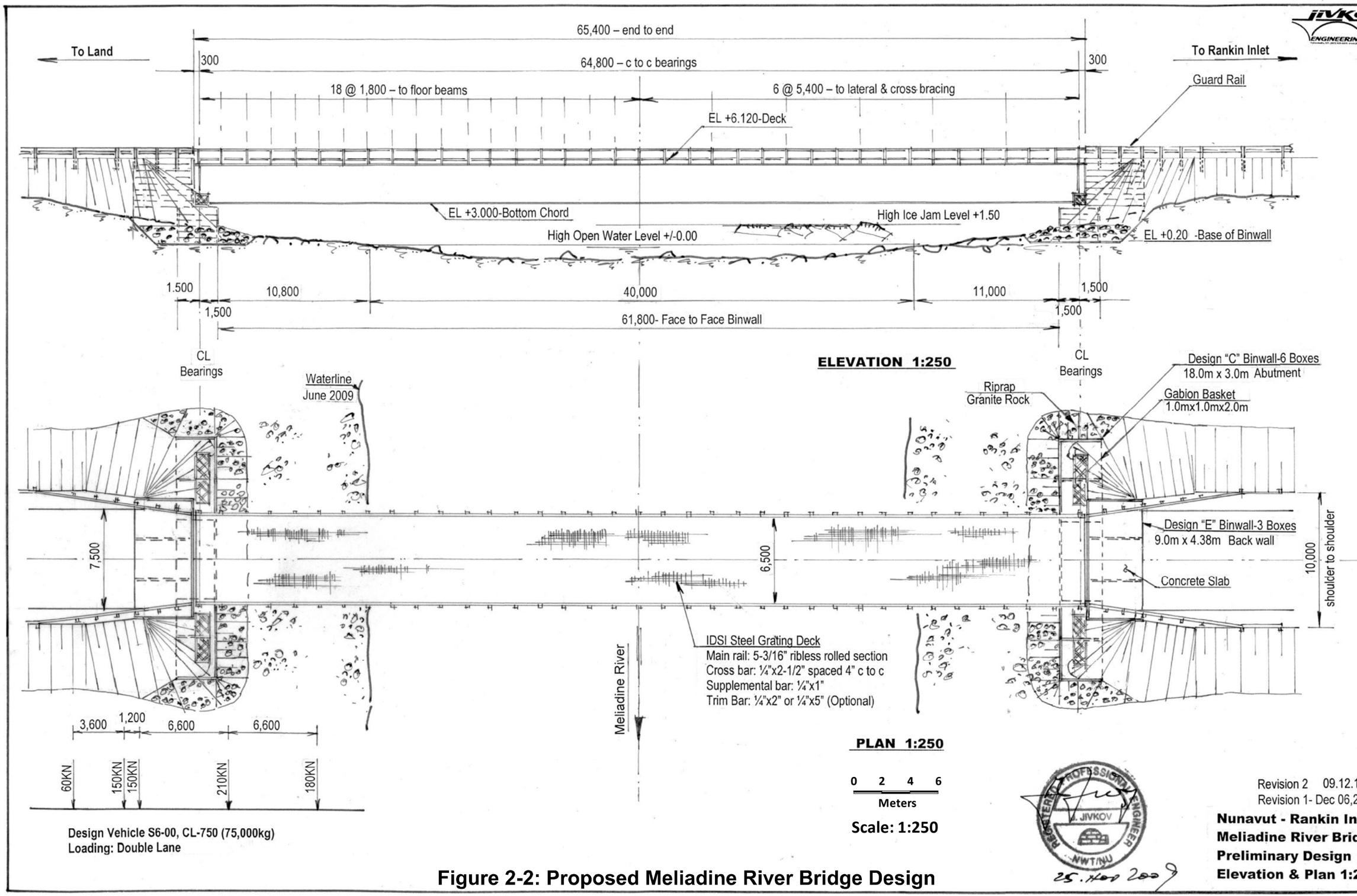

Figure 2-2: Proposed Meliadine River Bridge Design

Small deviations in the route should be expected between the proposed and final road plans. Third-party studies presently underway will determine the final route based on engineering, environmental, vegetation, archaeological, and economic factors. Terrain type and ground features that may lead to instability will all enter into the final route selection. Critical to the route selection is the location of quarries for aggregate and granular road building materials along the route where geotechnical drilling can be expected. These will be evenly spaced along the route to the extent possible. Samples of possible construction materials have been collected for laboratory analysis, including tests for acid rock drainage and metal leaching. All third-party investigations involve a 500 metre zone on either side of the proposed route.

The final road design will be engineered to current Nunavut standards for the amount and type of traffic, and for intended speed limits. The bridges will be built to the Government of Nunavut's standards.

Regular maintenance and controlled vehicle speeds will be implemented to reduce dust and improve road safety. Based on the Meadowbank example, it is likely that some arrangement will take place allowing some form of access to the road to the hunters and possibly to the general public. Such a proposal would emanate from consultation with the Kivalliq Inuit Association as land owner, the community and government.

For security and safety, public use of the road in the immediate area of the mill and the deposits will be restricted to mine personnel. These parts of the road can be expected to have heavy usage by large haul trucks coming from the open pits at each of the deposits.

2.2.2.1 Spur Road from the F Zone Deposit to Main Access Road

A 2.4 km long spur road will be required to connect the F Zone deposits with the main access road as shown on Figure 2-3. The alignment of this road will follow the shortest possible distance northwest from the pits. At this time, it is likely that the road would be an all-season road primarily used for ore haulage to the mill, and to transport the work force, equipment, and supplies to the site of the F Zone deposits. Detailed engineering of this road route will emerge from the Feasibility Study.

2.2.2.2 Spur Road from the Discovery Deposit to the Main Access Road

Access to the Discovery gold deposit will require a 9.4 km long spur road from the main access road as shown on Figure 2-3. A study to determine the routing is currently underway. Due to the limited life of the Discovery deposit, consideration is being given to construction of a less robust road than the main access road, or a winter road for ore shipment in the winter only. This will reduce disturbance to the environment and simplify reclamation. Detailed engineering of this road route will emerge from the Feasibility Study and will take into account any potential future longer term use of all or part of the road between Chesterfield Inlet and Rankin Inlet.

2.2.3 Mine Site Infrastructure

Details on the construction of the proposed Meliadine Gold Mine will emerge from the Feasibility Study, but the following information on general site layouts and construction is applicable.

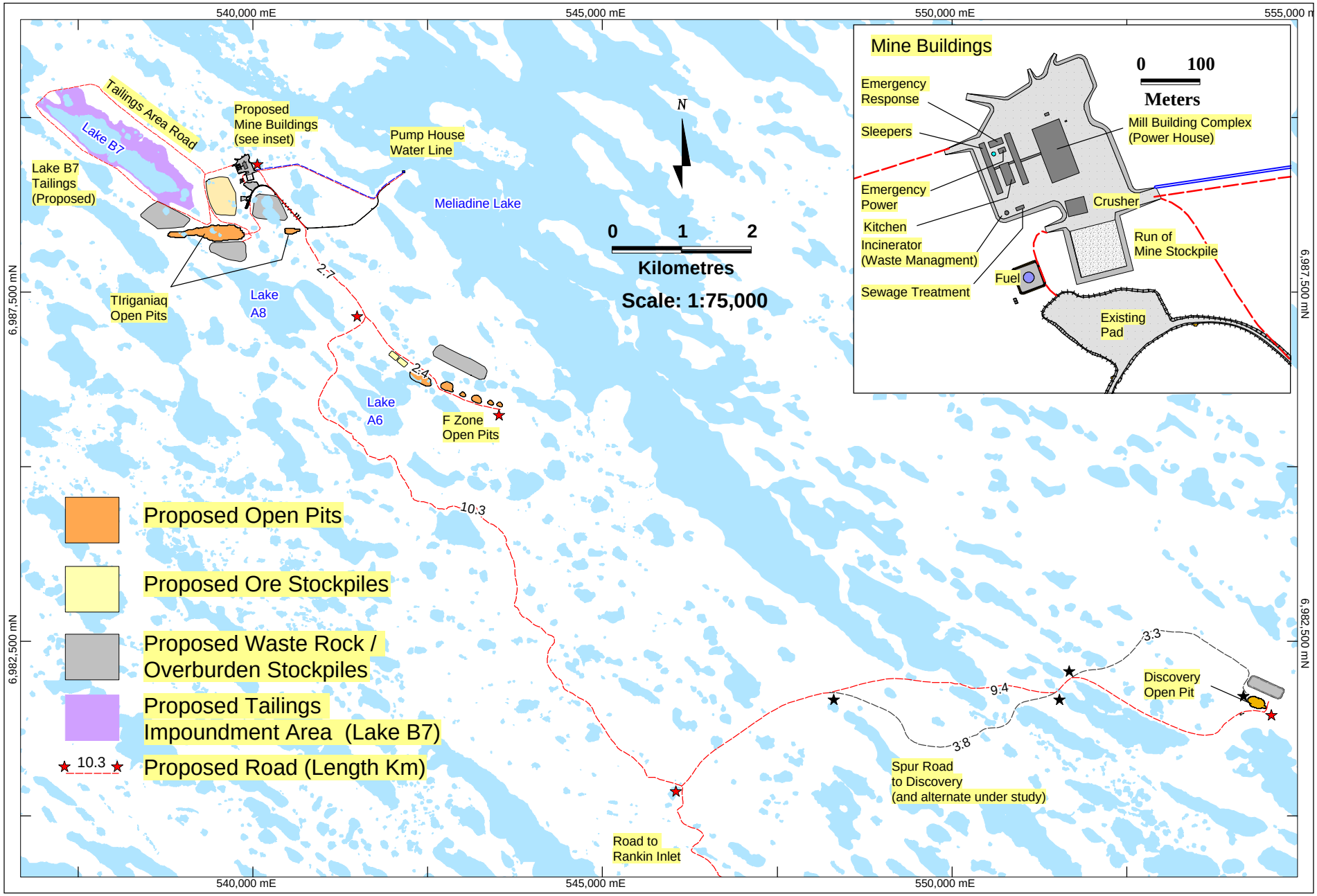

Figure 2-3: Meliadine Gold Project - Major Components

As shown on Figure 2-3, the Meliadine Gold Project will be composed of four major components:

- The underground mine at the Tiriganiaq deposit will use the existing portal built during the 2007-2008 underground exploration and bulk sampling program;
- Open pits on the Tiriganiaq, Discovery, and F Zone deposits with low grade, overburden, and waste rock management areas at each site. Temporary, self contained repair shops for equipment maintenance during the open pit operations and fuel storage at F Zone and Discovery deposits;
- Surface infrastructure near the Tiriganiaq deposit including a mill complex, accommodation complex, tank farm, waste management building, sewage treatment plant and water supply facilities. Fresh water will be supplied from a pump house located at Meliadine Lake;
- Tailings impoundment area in the Lake B7 basin west-northwest of the mill site.

Greater detail for Tiriganiaq, F Zone and Discovery deposits is presented in Figure 2-4, 2-5 and 2-6, respectively.

The main infrastructure, mill and accommodation complexes, for the proposed Meliadine Gold Mine will be constructed immediately north of the Tiriganiaq deposit. It is anticipated that approximately 50,000 tonnes of equipment and materials will be moved to the site over a three-year construction period.

On-site infrastructure and equipment proposed includes the following, but is not limited to:

- 80-person temporary construction camp (plus continued use of the 60 man exploration camp during the construction phase),
- Mill building complex housing the following:
    - Process plant and laboratory,
    - Mine maintenance shops,
    - Medical aid station,
    - Warehouse,
    - Administrative offices, mine dry facilities, lunch rooms, and
    - 14.6 MW power generation facilities and heat recovery.
- Crusher building, coarse ore storage tunnel & reinforced earth wall.
- Emergency response building.
- 250-person accommodation complex which also includes:
    - Kitchen and cafeteria,
    - Reception,
    - Recreational facilities,
    - Nurse's station,
    - Laundry and housekeeping, and
    - Water treatment plant.
- Emergency power generator building.
- Sewage treatment plant.
- Waste management building.
- Tank farm for 2.2 million litres of diesel fuel, plus Jet A and other fuels/oils.
- Water supply and distribution including fire protection system.
- On-site roads with drainage control.
- General outdoor lay-down areas.
- Explosives magazines.

- Explosive mixing and storage buildings.
- Fresh water pump house at Meliadine Lake
- General site vehicles including buses, ambulance, fire truck, snow plough, fuel trucks, forklifts, bobcats, pick-up trucks, all-terrain vehicles, and others.

The Meliadine Gold Project plans to add to the existing facilities on site to house workers building the permanent facilities. The existing 60-person exploration camp will be used but will be supplemented with an additional 80-person self-contained temporary camp during construction of the permanent camp. A concrete batch plant, maintenance shops, offices, warehouses, workshops and temporary power generators will all be required during construction. Present approved fuel storage at the site will suffice during construction if the all-season road access to Rankin Inlet is in place.

All the temporary facilities, including the exploration camp and the existing tank farm will be removed following completion of construction, with any affected areas reclaimed. The 50,000 litre double walled fuel storage tanks and fuel bladders will be removed once the tank farm has been completed; however, one such tank will be moved to F Zone and later Discovery for use during open pit mining. Additionally, a 50,000-litre tank for Jet A will be relocated to the permanent tank farm for helicopter use. Besides diesel and Jet A fuel, the tank farm will also hold small amounts of gasoline and oils.

To avoid creating an aggregate quarry simply for construction material, the Tiriganiaq open pit will be developed at the outset of construction, in conjunction with pre-development of the underground mine. Suitable waste rock from these two sources will be used in constructing pads, roads and dykes. The waste rock and esker material could also be used to make aggregate for concrete.

The first permanent building to be constructed will be the 250-person accommodation complex. It will be built on piles. To shorten the construction time, it is likely that the building will arrive on site as modules allowing quick assembly. Once this building is completed, it and the temporary construction camp and the exploration camp will house up to 500 people at the peak of construction. These numbers may change when the forthcoming Feasibility Study provides a better estimate of numbers of people required on site during both construction and operation. The accommodation complex will contain rooms for the workers, kitchen and cafeteria, laundry and housekeeping, recreational facilities, and a nurse's station.

The camp area will also have a water treatment plant for fresh water. A fresh water pump house will be built at Meliadine Lake. A jetty will be built into the lake to a point where the water depth exceeds 6 metres. A wet well will be installed near the end of the jetty and a pump house built over it. The pump house will be heated and insulated. A heat traced, insulated water line will run from the pump house to the fresh water supply tank in the mill complex.

A sewage treatment plant will be built capable of treating all human, kitchen, laundry and other liquid wastes. The final treated effluent will be piped to the mill building and added to the tailings stream for final disposal in the tailings impoundment area. Further details on sewage treatment during construction and operations will follow from the Feasibility Study and be outlined in the draft Environmental Impact Statement.

The mill complex will be the largest building on site and will be located a short distance from the underground portal, the Tiriganiaq open pit, and the tailings impoundment area. The mill complex has been positioned over an area of minimal overburden thickness, allowing the crusher and heavy mill

machinery to be founded on bedrock. Stripping the overburden and levelling the bedrock under the mill site will be a necessity.

Studies by Comaplex and Micon International suggest a minimum safety distance of 350 metres from the edge of the Tiriganiaq pit to the nearest buildings. The distance as shown in Figure 2-4 exceeds 500 metres. This distance provides an extra measure of safety.

The plant arrangement will follow typical Arctic construction practices and be designed to have a minimal footprint. It will be compact in size to minimize construction costs and to maximize heat and fuel conservation and efficiencies. The site experiences strong winds from the northwest, especially in winter, and tends to form snowdrifts downwind of obstructions. Major plant, camp, and other structures will be orientated with this in mind.

The mill building will house the ore processing plant and laboratory, workshops, warehouse, power generation facilities, dry, and offices. Final construction details will emanate from the Feasibility Study but the preliminary proposed layout and location of the mine infrastructure is shown on Figure 2-4.

The crusher will be located in a separate building immediately adjacent to the mill complex. Both of these buildings will need foundations to bedrock and will be steel frame - steel clad construction allowing disassembly upon the completion of mining and ore processing. The equipment inside the plant will be pre-fabricated in the south, and assembled on site. Pads for various ore stockpiles will be built around the crusher building to accommodate production material from the open pits and underground operations.

The emergency response and emergency power plant buildings will be separate from both the camp and the mill complex for fire separation. The emergency response building will include a garage for the site fire truck, first aid and training facilities and shelter for a limited number of people. The emergency power plant building will contain diesel generators sufficient to provide basic services in the event of a total failure of the main powerhouse. The mill building will provide shelter for the entire site workforce in the event of a fire in the camp and *vice versa.*

A waste management building will also be constructed and will be separate from all other buildings. This building will manage all waste generated on site and will house an incinerator, barrel crusher, and other equipment necessary for the effective and safe handling of waste materials.

2.2.4 Underground Development – Tiriganiaq Deposit

The underground mine will follow conventional technology with ramp access, using rubber-tired diesel machinery, and drill-and-blast excavation. Mined-out workings will be backfilled for reasons of ground stability, using coarse rock waste, tailings or some combination of these.

The mine will be ventilated by two exhaust fans at the east and west ends of the mine. These fans will be installed on the collars of two 3-metre diameter ventilation raises. The main ramp will be an intake airway with the intention that, in the event of a mine fire, rescue crews will enter the mine in fresh air. This scheme, to a scoping level of detail, is based on typical experience at underground mines in other parts of Canada. The ventilating air flow and required fan power will be defined as part of the Feasibility

Study when the final underground layout, and consequent resistance to air flow, are known in better detail.

Drilling has shown that permafrost persists to depths of 350 to 450 metres from surface. The proposed mine is therefore believed to be almost entirely situated in permafrost. The underground exploration program did not encounter any ground ice in the bedrock. Recent hydraulic conductivity testing (2009) indicates permeability will be low below the permafrost. The quantity of water that will result will be better known upon completion of ground water modelling, the results of which will be presented in the draft Environmental Impact Statement.

Table 2-3 shows the planned underground mining fleet.

Table 2-3: Underground Mining Equipment Fleet

Quantity	Type of Equipment
4	Two-boom, electric-hydraulic development jumbos
1	Single-boom, electric-hydraulic stope jumbos
2	Longhole drilling rigs
3	3-4-yard scooptrams
6	6-7-yard scooptrams
1	Mobile rockbreakers
1	Grader
8	Jeeps
3	Materials/modular trucks
2	Scissor lifts
5	40-ton mine haul trucks
2	Explosives trucks
4	Screening/bolting rigs
2	Service trucks

The forthcoming Feasibility Study could cause numbers and types of equipment to change slightly.